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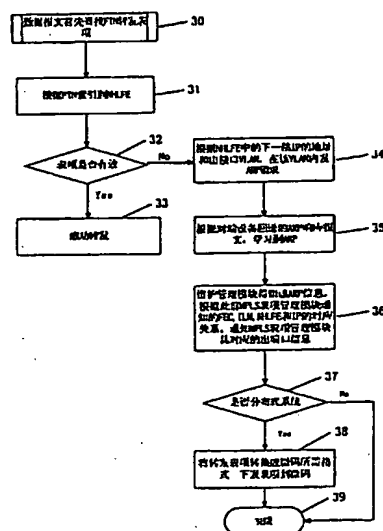
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(54) Title: METHOD OF MULTI-PORT VIRTUAL LOCAL AREA NETWORK (VLAN) SUPPORTED BY MULTI-PROTOCOL LABEL SWITCH (MPLS)

(54) 发明名称: 多协议标签交换 (MPLS) 支持多端口虚拟局域网 (VLAN) 的方法



30 FIRST DATA MESSAGE FINDING OUT FIB FORWARD TABLE ITEM
31 TO N/HLFE ACCORDING TO FIB INDEX
32 TABLE ITEM IS VALID OR NOT
33 FORWARD SUCCESSFULLY
34 SENDING ARP REQUEST IN THE VLAN, ACCORDING TO THE NEXT HOP IP ADDRESS OF N/HLFE AND OUT-INTERFACE VLAN
35 STUDY TO ARP, ACCORDING TO ARP RESPONSE MESSAGE RETURNED BY TO-END-DEVICE
36 MAINTAIN MANAGE MODULE KNOWING THE ARP INFORMATION, INFORMING MPLS TABLE ITEM MANAGE MODULE ABOUT ITS CORRESPONDING OUT-PORT INFORMATION ACCORDING TO THE FOREGOING CORRESPONDING RELATION OF FEC, LAM, N/HLFE AND IP INFORMED BY MPLS TABLE ITEM MANAGE MODULE
37 IS DISTRIBUTED SYSTEM OR NOT
38 TRANSFORM THE FORWARD TABLE ITEM TO FORMAT NEEDED BY MICRO-NODE. SEND TABLE DOWN TO MICRO-NODE ITEM
39 COMPLETED

(57) Abstract: The invention provides a method of multi-port Virtual Local Area Network (VLAN) supported by Multi-Protocol Label Switch (MPLS). This method includes steps: establishing Label Switch Protocol (LSP) through Label Distribute Protocol (LDP), getting Forward Equivalence Class (FEC) and label binding or the information of in-label and out-label binding, and address of LDP peer opposite to end, which is the next hop IP address; establishing forward relation table by MPLS table item managing module, and adding forward relation table item according to the achieved information; getting the output-port corresponding to the said forward relation table item; completing MPLS by the said port. Using this invention, we can enable MPLS function support multi-port VLAN on the three layers switcher and perform MPLS in VLAN.

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